Missouri Department of Natural Resources

PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: July 7, 2006

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: NPDES Permits and Engineering Section / Permit Comments. **Please include the permit number in all comment letters.**

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by August 7, 2006 or received in our office by 5:00 p.m. on August 10, 2006. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, http://www.dnr.mo.gov/env/wpp/index.html, or at the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: July 7, 2006 Permit Number: MO-0114812 Kansas City Regional Office	
FACILITY NAME AND ADDRESS	**NAME AND ADDRESS OF OWNER**
Kansas City Airport Authority (KCI) 601 Brazilia Avenue Kansas city, MO 64150	City of Kansas City 414 east 12th Street Kansas City, MO 64106
RECEIVING STREAM & LEGAL DESCRIPTION	**TYPE OF DISCHARGE**
Unnamed Tributary to Todd Creek (Todd Creek) Sec. 22, T52N, R34W, Platte County	Stormwater and Non-contact Cooling Water Permit Modification

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-00114812
Owner:	City of Kansas City
Address:	414 East 12th Street, Kansas City, MO 64106
Continuing Authority:	Kansas City Airport Authority (KCI)
Address:	601 Brazilia Avenue, Kansas City, MO 64153
Facility Name:	Kansas City Airport Authority (KCI)
Address:	601 Brazilia Avenue, Kansas City, MO 64153
Legal Description:	NW ¼, NE ¼, NW ¼, Sec. 22, T52N, R34W, Platte County
Receiving Stream:	Unnamed Tributary to Todd Creek (U)
First Classified Stream and ID:	Todd Creek (C)(00316)
USGS Basin & Sub-watershed No.:	(10240012-120002)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 – Airport - SIC #4581
Stormwater runoff/non-contact cooling water/fire protection.
Design flow is 489 MGD.
Outfall #002 – Airport – SIC #4581
Stormwater runoff.
Design flow is 76 MGD.
This permit also covers other stormwater, non-contact cooling water, and fire protection water outfalls that may be discovered by future investigations.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date Revised Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date

Edward Galbraith, Director of Staff, Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001 & #002						
Flow	MGD	*		*	once/month	24 hr. estimate
Precipitation	inches	*		*	once/month	24 hr. total
Biochemical Oxygen Demand$_5$	mg/L	45		30	once/month	grab
Chemical Oxygen Demand	mg/L	120		90	once/month	grab
Total Suspended Solids	mg/L	100		50	once/month	grab
Total Petroleum Hydrocarbons	mg/l	15		10	once/month	grab
Oil and Grease	mg/l	15		10	once/month	grab
pH – Units	SU	**		**	once/month	grab
Total BETX	mg/L	0.75		0.75	once/month	grab
Benzene	mg/L	0.07		0.07	once/month	grab
Methyl Tertiary Butyl Ether (MTBE)	mg/L	*		*	once/month	grab
Total Glycols***	mg/L	*		*	once/month***	grab
Ethylene Glycol***	mg/L	*		*	once/month***	grab
Propylene Glycol***	mg/L	*		*	once/month***	grab

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE _____.

Whole Effluent Toxicity (WET)Test	% Survival	See Special Conditions	once/year in August	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

*** The permittee shall sample once/month during the deicing season (October 1- March 31) for ethylene glycol or any other deicer used.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
   (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
      (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
      (2) controls any pollutant not limited in the permit.
   (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
   (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

   The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.

3. Changes in Discharges of Toxic Substances

   The permittee shall notify the Director as soon as it knows or has reason to believe:
   (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      (4) The level established in Part A of the permit by the Director.
   (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

4. Report as no-discharge when a discharge does not occur during the report period.

5. Industrial Sludge Disposal
   (a) Disposal of industrial sludge is not authorized by this permit. Industrial sludge shall be disposed at a permitted solid waste disposal facility in accordance with 10 CSR 80; or if the sludge is determined to be hazardous waste, shall be disposed at a permitted hazardous waste disposal facility pursuant to 10 CSR 25.
   (b) Non-hazardous sludge that is disposed on site or that is exempted under 10 CSR 80 must obtain applicable permits under 10 CSR 20-6.015 and 10 CSR 20-6.200.
   (c) Each effluent monitoring report shall also specify the date any sludge is removed from the facility, who removed the sludge and the number of gallons or quantity of sludge removed. The final disposal location shall be reported, including the name of the disposal facility, the solid waste or hazardous waste disposal permit number, and date of permit issuance.
   (d) This permit may (after due process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405 (d) of the Clean Water Act.

C. SPECIAL CONDITIONS (continued)

6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
   (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
   (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
   (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
   (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
   (e) There shall be no significant human health hazard from incidental contact with the water;
   (f) There shall be no acute toxicity to livestock or wildlife watering;
   (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
   (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

7. Whole Effluent Toxicity (WET) tests shall be conducted as follows:

SUMMARY OF WET TESTING FOR THIS PERMIT				
OUTFALL	A.E.C. %	FREQUENCY	SAMPLE TYPE	MONTH
001	100	Annually	Grab*	August

*Sample must be taken while biocides are being used

   (a) Test Schedule and Follow-Up Requirements
      (1) Perform a single-dilution test in the months and at the frequency specified above.
      If the effluent passes the test, do not repeat the test until the next test period. Submit results with the annual report.
      If the effluent fails the test, a multiple dilution test shall be performed
      within 30 days, and biweekly thereafter, until one of the following conditions are met:
         (a) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.
         (b) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.
      (2) The permittee shall submit a summary of all test results for the test series to the WPCP, Planning Section, P.O. Box 176, Jefferson City, MO 65102 within 14 days of the third failed test. DNR will contact the permittee with initial guidance on conducting a toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE). The permittee shall submit a plan for conducting a TIE or TRE to the Planning Section of the WPCP within 60 days of the date of DNR's letter. This plan must be approved by DNR before the TIE or TRE is begun. A schedule for completing the TIE or TRE shall be established in the plan approval.
      (3) Upon DNR's approval, the TIE/TRE schedule may be modified if toxicity is intermittent during the TIE/TRE investigations. A revised WET test schedule may be established by DNR for this period.
      (4) If a previously completed TIE has clearly identified the cause of toxicity, additional TIEs will not be required as long as effluent characteristics remain essentially unchanged and the permittee is proceeding according to a DNR approved schedule to complete a TRE and reduce toxicity. Regularly scheduled WET testing as required in the permit, without the follow-up requirements, will be required during this period.
      (5) In addition to the WET test summary report required in part (2), all failing test results shall be reported to DNR within 14 days of the availability of the results.
      (6) All WET test results for the reporting period shall be summarized and submitted to DNR by the end of the following October. When WET test sampling is required to run over one DMR period, each DMR report shall contain information generated during the reporting period.

C. SPECIAL CONDITIONS (continued)

7. Whole Effluent Toxicity (WET) tests (continued)

(b) PASS/FAIL procedure and effluent limitations

(1) To pass a single-dilution test, mortality observed in the AEC test concentration shall not be significantly different (at the 95% confidence level; p = 0.05) than that observed in the upstream receiving-water control sample. The appropriate statistical tests of significance will be those outlined in the most current USEPA acute toxicity manual or those specified by the MDNR.

(2) To pass a multiple-dilution test:

(a) the computed percent effluent at the edge of the zone of initial dilution, Acceptable Effluent Concentration (AEC), must be less than three-tenths (0.3) of the LC_{50} concentration for the most sensitive of the test organisms; or,

(b) all dilutions equal to or greater than the AEC must be nontoxic. Failure of one multiple-dilution test is an effluent limit violation.

(c) Test Conditions

(1) Test species: Ceriodaphnia dubia and Pimephales promelas (fathead minnow). Organisms used in WET testing should come from cultures reared for the purpose of conducting toxicity tests and should be cultured in a manner consistent with the most current USEPA guidelines. All test animals should be cultured as described in EPA-600/4-90/027.

(2) Test period: 48 hours at the "Acceptable Effluent Concentration" (AEC) specified above.

(3) When dilutions are required, upstream receiving stream water shall be used as dilution water. If upstream water is unavailable or if mortality in the upstream water exceeds 10%, "reconstituted" water will be used as dilution water. Procedures for generating reconstituted water will be supplied by the MDNR upon request.

(4) Tests should be initiated immediately after the sample is collected, but tests must be initiated no later than 36 hours after sample collection.

(5) Single-dilution tests will be run with:

(a) Effluent at the AEC concentration;

(b) 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent; and

(c) reconstituted water.

(6) Multiple-dilution tests will be run with:

(a) 100%, 50%, 25%, 12.5%, and 6.25% effluent, unless the AEC is less than 25% effluent, in which case dilutions will be 4 times the AEC, two times the AEC, AEC, 1/2 AEC and 1/4 AEC;

(b) 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent; and

(c) reconstituted water.

(7) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.

D. SCHEDULE OF COMPLIANCE

By June 1, 2003, submit analysis results for Total Organic Carbon, Ammonia, Nitrogen total organic, and Phosphorus total, for all outfalls to complete Form C Table A.

SUMMARY OF TEST METHODOLOGY FOR WHOLE-EFFLUENT TOXICITY TESTS

Whole-effluent-toxicity test required in NPDES permits shall use the following test conditions when performing single or multiple dilution methods. Any future changes in methodology will be supplied to the permittee by the Missouri Department of Natural Resources (MDNR). Unless otherwise specified by MDNR, procedures should be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA/600/4-90/027.

Test conditions for Ceriodaphnia dubia:

Test duration:	48 h
Temperature:	25 ± 2°C
Light Quality:	Ambient laboratory illumination
Photoperiod:	16 h light, 8 h dark
Size of test vessel:	30 mL (minimum)
Volume of test solution:	15 mL (minimum)
Age of test organisms:	<24 h old
No. of animals/test vessel:	5
No. of replicates/concentration:	4
No. of organisms/concentration:	20 (minimum)
Feeding regime:	None (feed prior to test)
Aeration:	None
Dilution water:	Upstream receiving water; if no upstream flow, synthetic water modified to reflect effluent hardness.
Endpoint:	Mortality (Statistically significant difference from upstream receiving water control at $p \leq 0.05$)
Test acceptability criterion:	90% or greater survival in controls

Test conditions for (Pimephales promelas):

Test duration:	48 h
Temperature:	25 ± 2°C
Light Quality:	Ambient laboratory illumination
Photoperiod:	16 h light/ 8 h dark
Size of test vessel:	250 mL (minimum)
Volume of test solution:	200 mL (minimum)
Age of test organisms:	1-14 days (all same age)
No. of animals/test vessel:	10
No. of replicates/concentration:	4 (minimum) single dilution method 2 (minimum) multiple dilution method
No. of organisms/concentration:	40 (minimum) single dilution method 20 (minimum) multiple dilution method
Feeding regime:	None (feed prior to test)
Aeration:	None, unless DO concentration falls below 4.0 mg/L; rate should not exceed 100 bubbles/min.
Dilution water:	Upstream receiving water; if no upstream flow, synthetic water modified to reflect effluent hardness.
Endpoint:	Mortality (Statistically significant difference from upstream receiving water control at $p \leq 0.05$)
Test Acceptability criterion:	90% or greater survival in controls

Date of Fact Sheet: January 3, 2003

Date of Public Notice: February 14, 2003

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0114812

FACILITY NAME: Kansas City Airport Authority (KCI)

OWNER NAME: City of Kansas City

LOCATION: NW ¼, NE ¼, NW ¼, Sec. 22, T52N, R34W County: Platte

RECEIVING STREAM: Unnamed tributary to Todd Creek (10240012-120002)

FACILITY CONTACT PERSON: Sabrina Attaluri, Environmental Manager TELEPHONE: (816) 243-3110

FACILITY DESCRIPTION AND RATIONALE

The Federal Water Pollution Control Act established the National Pollutant Discharge Elimination System (NPDES) program in order to regulate discharges of pollutants from point sources into the waters of the United States. All such discharges are unlawful without a permit, and discharges not in compliance with all permit terms and conditions are unlawful. NPDES permits in Missouri are issued by the Department of Natural Resources.

The City of Kansas City has applied for renewal of its NPDES operating permit for the Kansas City Airport Authority. The facility's current NPDES permit expired September 25, 2002.

The proposed permit allows for discharges of stormwater runoff after sedimentation treatment. The actual quantity of discharged water is dependant upon the intensity and duration of the storm event. The sedimentation basins discharge to an unnamed tributary to Todd Creek.

Rationale for effluent limits are as follows:

In order to protect the water quality of waters of the state, effluent limitations are established in accordance with federal and state laws. There are no effluent standards specifically promulgated for stormwater discharges. Therefore the effluent limitations proposed in this permit are based on the Water Quality Review Sheet.

Since this facility adds de-scaler to non-contact cooling water, this permit proposes that the Whole Effluent Toxicity (WET) test be required with an acceptable effluent concentration of 100%. The WET will measure the toxicity of the effluent since a standard method of analysis for the substance is not available.

The City has constructed a deicing collection and pretreatment system at KCI, which collects all runoff from plane deicing and discharges the wastewater to the city sanitary sewer system.

This permit will be issued for a period of five years.

Missouri Department of Natural Resources
Water Pollution Control Program
Planning Section

Water Quality Review Sheet

Determination of Effluent Limits

Facility Information

FACILITY NAME: KC, Kansas City International Airport NPDES #: MO-0114812

FACILITY TYPE/DESCRIPTION: Stormwater runoff/non-contact cooling water/fire protection.

ECOREGION: Central Irregular Plains 8- DIGIT HUC: 10240012 COUNTY: Platte

Central Irregular Plains
Mississippi Alluvial Plains
Osage Plains
Ozark Highlands

LEGAL DESCRIPTION: NW NE NW Sec.22,T52N,R34W LATITUDE/LONGITUDE: +3918421/-9442313

WATER QUALITY HISTORY: No stream surveys for this facility. DMRs indicate BOD_5 and COD exceedences during deicing activities.

Outfall Characteristics

OUTFALL	DESIGN FLOW (CFS)	TREATMENT TYPE	RECEIVING WATERBODY	OTHER
001	758.0	Stormwater/Non-Contact Cooling Water	Tributary to Todd Creek	
002	117.8	Stormwater	Tributary to Todd Creek	

Receiving Waterbody Information

WATERBODY	CLASS	7Q10(CFS)	*DESIGNATED USES	OTHER CHARACTERISTICS
Tributary to Todd Creek	U	0.0	None	< 0.1 mile to Todd Creek
Todd Creek	C	0.1	AQL, LWW	WBID: 0316

*Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND), Boating & Canoeing (BTG), Drinking Water Supply (DWS), Whole Body Contact Recreation (WBC), Protection of Warmwater Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW)

COMMENTS Deicing activities occur at most airports between October 1 and March 31. EPA-821-R-00-016 "Preliminary Data Summary Airport Deicing Operations (Revised)" was used to determine deicing compound monitoring requirements.

MIXING CONSIDERATIONS

Mixing Zone.
No mixing zone allowed due to unclassified receiving stream.

Zone of Initial Dilution (Z.I.D.).
No Z.I.D. allowed due to unclassified receiving stream.

Permit Limits And Information

TMDL WATERSHED: (Y OR N) [N] W.L.A. STUDY CONDUCTED: (Y OR N) [N] DISINFECTION REQUIRED: (Y OR N) [N] DISINFECTION WAIVER: (Y, N, NA) [N]

OUTFALLS# 001 & 002: Stormwater/Non-Contact Cooling Water

WET TEST (Y OR N): [N] FREQUENCY: N/A A.E.C. N/A LIMIT: N/A

PARAMETER	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	Once/Month	24 Hour Estimate
Precipitation	inches	*		*	Once/Month	24 Hour Total
Biochemical Oxygen Demand (BOD_5)	mg/L	45		30	Once/Month	Grab
Chemical Oxygen Demand	mg/L	120		90	Once/Month	Grab
Total Suspended Solids	mg/L	100		50	Once/Month	Grab
Total Petroleum Hydrocarbons (TPH)	mg/L	15		10	Once/Month	Grab
Oil and Grease	mg/L	15		10	Once/Month	Grab
pH	SU	6 - 9		6 - 9	Once/Month	Grab
Total BTEX	mg/L	0.75		0.75	Once/Month	Grab
Benzene	mg/L	0.07		0.07	Once/Month	Grab
Methyl Tertiary Butyl Ether (MTBE)	mg/L	*		*	Once/Month	Grab
Ethylene Glycol**	mg/L	*		*	Once/Month	Grab
Propylene Glycol**	mg/L	*		*	Once/Month	Grab
Total Glycols**	mg/L	*		*	Once/Month	Grab

** Monitoring for deicing compounds once/month during deicing season (October 1 – March 31)

Receiving Water Monitoring Requirements

No in-stream monitoring requested at this time.

Derivation and Discussion of Limits

Water quality based limits are based on “chronic” aquatic-life protection values from Missouri’s water quality standards. Maximum daily effluent limits are 1.5 times monthly average effluent limits.

Outfalls 001 and 002:

- **Biochemical Oxygen Demand (BOD_5).** Same as current permit; 45 mg/L daily maximum, 30 mg/L monthly average.
- **Chemical Oxygen Demand (COD).** Same as current permit; 120 mg/L daily maximum, 90 mg/L monthly average.
- **Total Suspended Solids.** Same as current permit; 100 mg/L daily maximum, 50 mg/L monthly average.
- **Total Petroleum Hydrocarbons (TPH).** Same as current permit; 15 mg/L daily maximum, 10 mg/L monthly average.
- **Oil & Grease.** Same as current permit; 15 mg/L daily maximum, 10 mg/L monthly average.
- **pH.** Same as current permit; 6 – 9 SU daily maximum and monthly average limits.
- **Total BTEX.** 0.75 mg/L daily maximum and monthly average limits; Total BTEX is the sum of benzene, ethylbenzene, toluene, and xylene concentrations. Effluent limits for Total BTEX similar to those used at other airport facilities and found in General Permit (Airports).
- **Benzene.** Criterion (Human Health Protection – Fish Consumption); 0.07 mg/L daily maximum and monthly average limits.
- **Methyl Tertiary Butyl Ether (MTBE).** Monitoring requirement only.
- **Ethylene Glycol, Propylene Glycol, and Total Glycols.** Monitoring requirement only during deicing season (October 1 – March 31).

Reviewer: JH Date: 12/3/02 Unit Chief: MD